

GENERAL:

- DRAWINGS TO BE READ IN CONJUNCTION WITH DOCUMENT FA-R-20-17 SPECIFICATION
- ALL DRAWINGS TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DETAILS AND CALCULATIONS
- DO NOT SCALE FROM THIS DRAWING
- LANDSCAPING INDICATIVE ONLY AND SUBJECT TO A FULL DETAILED DESIGN
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE BUILDING REGULATIONS AND RELEVANT CODES OF PRACTICE AND BRITISH STANDARDS
- UNLESS OTHERWISE NOTED, DIMENSIONS ARE SHOWN TO STRUCTURE

ALL DIMENSIONS TO BE CHECKED ON SITE

BUILDING SAFETY ACT
THE CLIENT MUST ABIDE BY THEIR DUTIES AS DEFINED WITHIN THE BUILDING SAFETY ACT 2022 WHICH RELATE TO ANY BUILDING WORKS.

CDM REGULATIONS
THE CLIENT MUST ABIDE BY THE CONSTRUCTION DESIGN AND MANAGEMENT REGULATIONS 2015 WHICH RELATE TO ANY BUILDING WORKS WHICH:

(a) LASTS LONGER THAN 30 WORKING DAYS AND HAS MORE THAN 20 WORKERS WORKING SIMULTANEOUSLY AT ANY POINT IN THE PROJECT;
OR:
RI EXCEEDS 500 PERSON DAYS.

NB THIS LIST IS NOT EXHAUSTIVE AND THE PC (PRINCIPAL CONTRACTOR) HAS A DUTY TO CO-OPERATE, CO-ORDINATE AND CO-ORDINATE WITH THE PD (PRINCIPAL DESIGNER) AND DESIGN TEAM AND COMPILE A COMPREHENSIVE RISK REGISTER WITH METHODS OF WORK STATEMENTS AT THE DESIGN STAGE PRIOR TO COMMENCEMENT OF WORK ON SITE. RISKS SHALL BE ANTICIPATED, REDUCED AND/OR AVOIDED WHERE POSSIBLE. THIS LIST SERVES TO HIGHLIGHT KEY RISKS IDENTIFIED BY THE DESIGN TEAM AND PD IN THE CONSTRUCTION, USE AND MAINTENANCE OF THE BUILDING.

REFER TO DESIGNS CDMA (HAZARD IDENTIFICATION AND ANALYSIS AND OPTION MATRIX FOR FURTHER INFORMATION)

CDM - RISK REGISTER

- HAZARD - WORKING AT HEIGHT**
ADEQUATE PROVISION FOR SAFE ACCESS VIA SCAFFOLDING DURING THE WORKS. WORKING AT HEIGHT RULES TO BE OBSERVED DURING CONSTRUCTION PHASE AND FOR ALL ROUTINE ROOF MAINTENANCE INCLUDING GUTTER MAINTENANCE.
- HAZARD - FALLING OBJECTS**
CONSTRUCTION WORKERS TO BE PROTECTED FROM FALLING OBJECTS FROM WORKS TO ROOF DURING THE CONSTRUCTION WORKS.
- HAZARD - COLLAPSING STRUCTURE**
TEMPORARY WORKS AND RESTRAINTS REQUIRED TO PROPOSED RETAINING WALLS DURING THE CONSTRUCTION WORKS. CONTRACTOR AND STRUCTURAL ENGINEER TO CO-ORDINATE.
- HAZARD - MANUAL HANDLING**
MANUAL LIFTING RULES TO BE OBSERVED WHEN ASSESSING WEIGHTS OF CONSTRUCTION MATERIALS. IF BLOCK WORK EXCEEDS 20KG, 2 MAN LIFT REQUIRED. PC AND SUB-CONTRACTOR TO CARRY OUT RISK ASSESSMENT PRIOR TO COMMENCEMENT.
- HAZARD - GLAZING PANELS**
CONSTRUCTION & MAINTENANCE - NEW GLAZING WILL REQUIRE ROUTINE MAINTENANCE/CLEANING. IT IS CONSIDERED THAT THE HEIGHT OF THE GLAZING IS WITHIN THE LIMITS OF EXTENDABLE WINDOW CLEANING EQUIPMENT AND IT IS THEREFORE CONSIDERED THAT WINDOW CLEANING OPERATIVES WILL CARRY OUT THE WORK FROM GROUND LEVEL. WHERE HEIGHTS OF WINDOWS OR ACCESS ISSUES PRECLUDE EXTERNAL MAINTENANCE INTERNALLY HINGED WINDOW FRAMES WILL BE SPECIFIED FOR CLEANING/ MAINTENANCE. IN THE UNLIKELY EVENT THAT A FULL HEIGHT GLAZING PANEL NEEDS TO BE REPLACED, THE OCCUPIER SHOULD ARRANGE TO DO SO OBSERVING THE 20KG LIFTING TWO MAN LIFT RULE.
- HAZARD - LIMTEL COLUMN & BEAM INSTALLATION**
CONSTRUCTION LIFTS & BEAMS/STRUCTURAL ELEMENTS TO BE LIFTED INTO PLACE WITH APPROPRIATE EQUIPMENT BY SKILLED OPERATIVES.

IN ALL CASES - REFER TO CDM RISK REGISTER PROVIDED BY MAIN CONTRACTOR

ABBREVIATION NOTES:

- RWP RAINWATER DOWNPIPE
- SVP SOIL VENT PIPE
- AAV AUTOMATIC AIR VALVE
- TG TOUGHENED GLASS
- MECHANICAL EXTRACT
- S/H/C SMOKE/HEAT/CARBON MONOXIDE DETECTOR
- DENOTES PROPOSED DRAINAGE RUNS
- DENOTES ASSUMED EXISTING DRAINAGE RUNS
- DENOTES SITE BOUNDARY
- DENOTES INDICATIVE POSITION OF STRUCTURE OVERHEAD TO STRUCTURAL ENGINEER'S DETAILS & SPECIFICATION
- Q DENOTES SOIL VENT PIPE
- DENOTES DEMOLITION LINES
- 500 DENOTES AS EXISTING SURVEYED DIMENSIONS
- 500 DENOTES PROPOSED DIMENSIONS
- 30MIN DENOTES MINIMUM 30 MINUTE CAVITY BARRIER - PARTY WALL
- 30MIN DENOTES MINIMUM 30 MINUTE CAVITY CLOSER

SOLID FLOOR INSULATION OVER SLAB

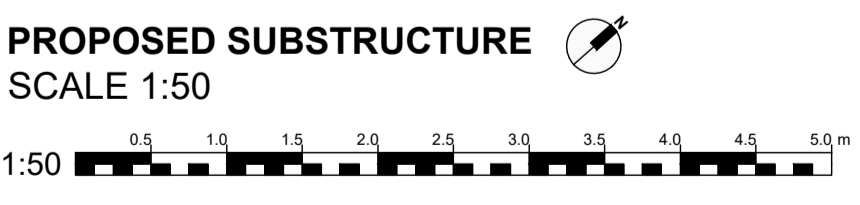
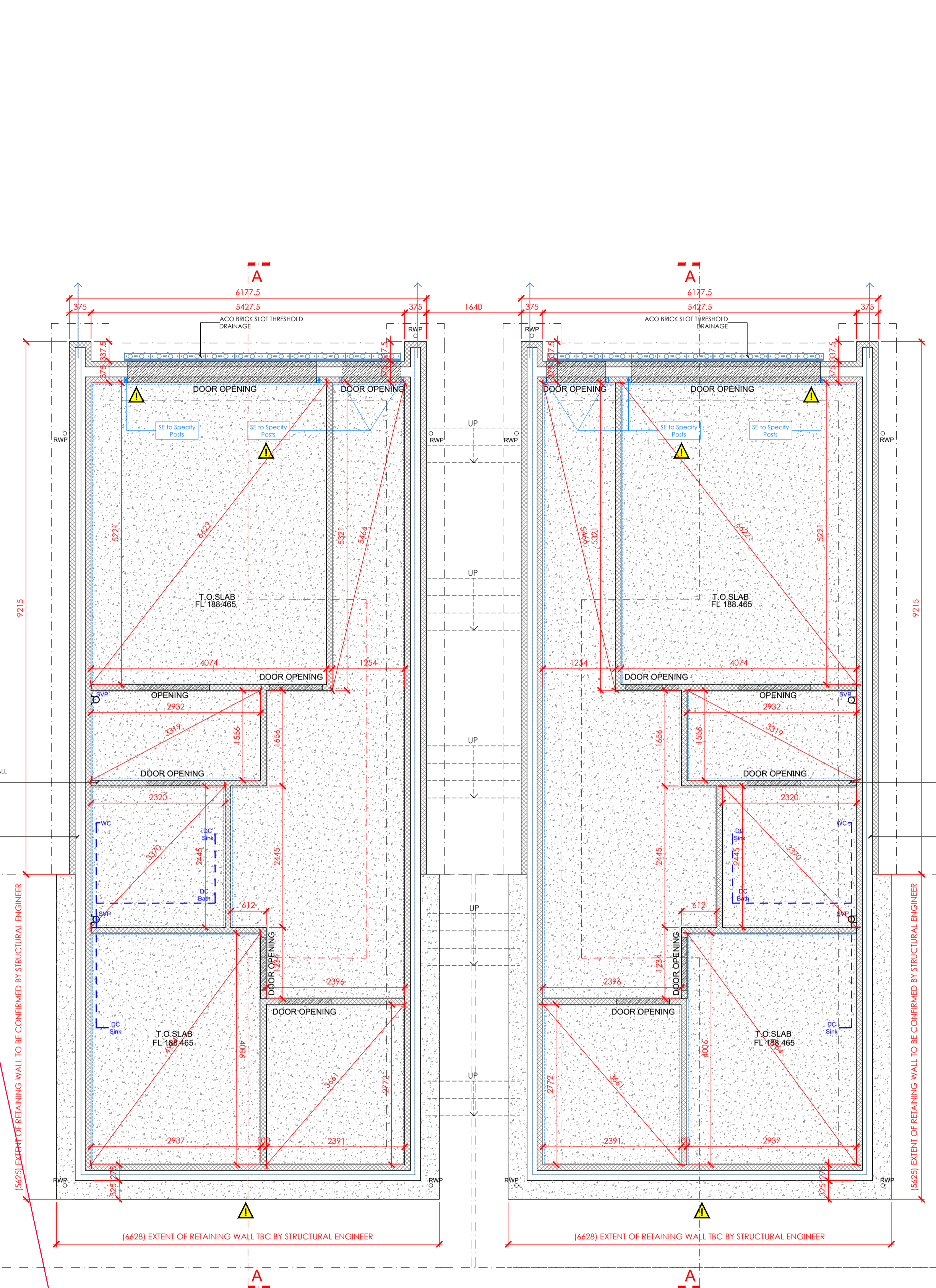
TO MEET U VALUE OF 0.11 W/M²K

- SOLID GROUND FLOOR TO CONSIST OF 150MM CONSOLIDATED WELL-RAMMED HARD CORE, BLINDED WITH 50MM SAND BUNDLING.
- PROVIDE 100MM ST2 OR GEN2 GROUND BEARING SLAB CONCRETE MIX TO CONFORM TO BS 8500-2:2023 AND BS EN 206 OVER A 1600 GAUGE RADON POLYTHENE DPM 300MM DOUBLE WELTED AND TAPED WITH GAS PROOF TAPE AT JOINTS AND SERVICE ENTRY POINTS.
- DPM TO BE LAPPED IN WITH DPC / R/W WATERPROOFING IN RETAINING WALLS.
- FLOOR TO BE INSULATED OVER SLAB AND DPM WITH MIN 150MM THICK KINGSPAN KOOLTHERM INSULATION.
- 25MM INSULATION TO CONTINUE AROUND FLOOR PERIMETERS TO AVOID THERMAL BRIDGING.
- A VCI SHOULD BE LAID OVER THE INSULATION BOARDS AND TURNED UP 100MM AT ROOM PERIMETERS BEHIND THE SKIRTINGS. ALL JOINTS TO BE LAPPED BY 150MM AND SEALED.
- FINISH WITH 75MM SAND/CEMENT FINISHING SCREED WITH LIGHT MESH REINFORCEMENT.
- WHERE DRAIN RUNS PASS UNDER NEW FLOOR, PROVIDE A142 MESH 1.0M WIDE AND MIN 50MM CONCRETE COVER OVER LENGTH OF DRAIN.
- SCREEDS TO BE ISOLATED AT ALL EDGES, ABUTMENTS AND COLUMNS TO ALLOW FOR MOVEMENT DUE TO THERMAL LOADINGS. JOINTS TO BE FILLED WITH A SUITABLE FLEXIBLE FILLER. GROUT MUST NOT BE USED. THE MANUFACTURERS' GUIDANCE FOR BOTH THE FLOOR SCREED AND THE TILING MUST BE FOLLOWED TO DETERMINE THE MINIMUM THICKNESS OF EDGE STRIP REQUIRED TO ALLOW FOR EXPANSION.

UNDERFLOOR HEATING

- UNDERFLOOR HEATING INSTALLATION TO BE DESIGNED AND SPECIFIED AS AN INTEGRATED PACKAGE BY THE SYSTEM MANUFACTURER TO ENSURE COMPATIBILITY OF ALL THE COMPONENTS.
- PIPEWORK LOOPS DESIGN, LAYOUT AND SIZING OF THE SYSTEM TO BE IN ACCORDANCE WITH BS EN 12641(-)5, THE MOST APPROPRIATE LAYOUT FOR A PARTICULAR APPLICATION SHOULD BE CONFIRMED BY THE SYSTEM MANUFACTURER.
- MAXIMUM FLOOR TEMPERATURE TO BE 29°C, OR 27°C WHERE FLOOR TILING OR RESILIENT FLOOR IS PROPOSED IN COMPLIANCE WITH BS EN 1264-2(1).
- PIPEWORK TO BE INSTALLED DIRECTLY TO RIGID INSULATION USING PROPRIETARY CLIP RAILS AND CLIPS. SPACED IN ACCORDANCE WITH PIPE LAYOUT DESIGN.
- PIPEWORK LOOPS TO BE CHARGED WITH WATER AND PRESSURE TESTED PRIOR BEFORE SCREED IS POURED.
- PIPEWORK LOOPS LEADING TO AND FROM THE MANIFOLDS TO BE KEPT FREE OF ANY SHARP BENDS THAT COULD RESTRICT THE FREE FLOW OF WATER. WHERE 90° BENDS ARE REQUIRED, METAL FORMERS TO BE USED TO PREVENT TWISTING AND CONSTRUCTION.
- ALL JOINTS BETWEEN THE MANIFOLD AND PIPEWORK LOOPS ARE TO BE ACCOMMODATED ABOVE THE LEVEL OF SCREED. NO JOINTS TO BE EMBEDDED IN THE SCREED.
- PIPEWORK LOOPS SHOULD NOT EXTEND RIGHT TO THE EDGE OF THE FLOORS AND UNDER THE SKIRTING BOARDS.
- PIPEWORK FRINGS TO MAINTAIN THE INTEGRITY OF THE INSULATION AND OTHER MATERIALS.
- EACH ROOM SHOULD BE PROVIDED WITH THERMOSTATIC ROOM CONTROLS, CAPABLE OF BEING USED TO SEPARATELY ADAPT THE HEATING OUTPUT IN EACH ROOM SERVED BY THE HEATING APPLIANCE.
- LABELLING TO BE PROVIDED TO ENABLE EFFECTIVE INSPECTION, COMMISSIONING, MAINTENANCE AND REPAIRS OF THE UNDERFLOOR HEATING INSTALLATION AND TO IDENTIFY THE ROOMS TO WHICH INDIVIDUAL PORTS OF THE MANIFOLD ARE CONNECTED.
- ALL INSTALLED EQUIPMENT IN UNDERFLOOR HEATING SYSTEMS TO BE COMMISSIONED IN ACCORDANCE WITH BS EN 1264-4 BEFORE FLOOR FINISH IS APPLIED.

BUILDING REGULATIONS



SITE INVESTIGATION:

A SURVEY OF THE SITE IS TO BE CARRIED OUT BY A SUITABLY QUALIFIED PERSON INCLUDING, AN INITIAL GROUND INVESTIGATION, A DESK STUDY AND A WALK OVER SURVEY. A COPY OF ALL REPORTS AND SURVEYS TO BE SENT TO BUILDING CONTROL FOR APPROVAL BEFORE WORKS COMMENCE ON SITE. ANY ASBESTOS, CONTAMINATED SOIL OR LEAD PAINT FOUND ON THE SITE IS TO BE REMOVED BY A SPECIALIST. ASBESTOS IS TO BE DEALT WITH IN ACCORDANCE WITH THE CONTROL OF ASBESTOS REGULATIONS 2012.

SITE PREPARATION:

GROUND TO BE PREPARED FOR NEW WORKS BY REMOVING ALL UNSUITABLE MATERIAL, VEGETABLE MATTER AND TREE OR SHRUB ROOTS TO A SUITABLE DEPTH TO PREVENT FUTURE GROWTH. SEAL UP, CAP OFF, DISCONNECT AND REMOVE EXISTING REDUNDANT SERVICES AS NECESSARY. REASONABLE PRECAUTIONS MUST ALSO BE TAKEN TO AVOID DANGER TO HEALTH AND SAFETY CAUSED BY CONTAMINANTS AND GROUND GASES E.G. LANDFILL GASES, RADON, VAPOURS ETC... ON OR IN THE GROUND COVERED, OR TO BE COVERED BY THE BUILDING.

FOUNDATIONS:

ALL FOUNDATIONS STRICTLY IN ACCORDANCE WITH STRUCTURAL ENGINEER'S DESIGN AND DETAILS. PROVIDE CONCRETE FOUNDATIONS AND RC RETAINING WALLS IN ACCORDANCE WITH TABLE 10 OF APPROVED DOCUMENT A. THICKNESS OF CONCRETE NOT TO BE LESS THAN 225MM AND MINIMUM WIDTH OF FOUNDATION TO BE EQUAL TO THE WIDTH OF THE WALL PLUS 300MM. CONCRETE MIX TO CONFORM TO BS EN 206:2013(A2:2021) AND BS 8500-2. ALL FOUNDATIONS TO BE A MINIMUM OF 1000MM BELOW GROUND LEVEL. DEPTH AND SIZE OF FOUNDATION TO BE APPROVED ON SITE BY BUILDING CONTROL TO SUIT SITE CONDITIONS. ALL CONSTRUCTED IN ACCORDANCE WITH 2010 BUILDING REGULATIONS A1/2 AND BS 8001:5 CODE OF PRACTICE FOR FOUNDATIONS (1+1:2020). ENSURE FOUNDATIONS ARE CONSTRUCTED BELOW INVERT LEVEL OF ANY ADJACENT DRAINS. BASE OF FOUNDATIONS SUPPORTING INTERNAL WALLS TO BE MIN 600MM BELOW GROUND LEVEL. SULPHATE RESISTANT CEMENT TO BE USED IF REQUIRED. PLEASE NOTE THAT SHOULD ANY ADVERSE SOIL CONDITIONS BE FOUND OR ANY MAJOR TREE ROOTS IN EXCAVATIONS, BUILDING CONTROL TO BE CONTACTED AND THE ADVICE OF A STRUCTURAL ENGINEER SHOULD BE SOUGHT.

WALLS BELOW GROUND:

ALL NEW WALLS BELOW GROUND TO BE CONSTRUCTED USING BLOCKWORK COMPLIANT WITH BS EN 771 AND SUITABLE FOR BELOW GROUND LEVEL OR SEMI ENGINEERING BRICKWORK. WALLS TO BE BUILT USING 1:4 MASONRY MORTAR MIX OR EQUAL APPROVED SPECIFICATION TO BS EN 1996-1-1. CAVITIES BELOW GROUND LEVEL TO BE FILLED WITH LEAN MIX CONCRETE MIN 225MM BELOW DAMP PROOF COURSE, OR WEEP/LEAN MIX BACKFILL AT BASE OF CAVITY WALL (150MM BELOW DAMP COURSE) LAID TO FALL TO PIPESHOLES.

MOVEMENT JOINTS:

TO BE PROVIDED ACCORDING TO MANUFACTURERS GUIDANCE AND ENGINEERS SPECIFICATION.

PIPES PASSING THROUGH FOUNDATIONS:

THE LOAD-BEARING CAPABILITY OF FOUNDATIONS MUST NOT BE AFFECTED WHERE SERVICES PASS THROUGH.

THE PIPE WORK TO BE SLEEVED, FLEXIBLE MATERIAL TO BE PROVIDED AROUND PIPE AND FLEXIBLE JOINTS TO BE PROVIDED WHERE PIPES EXIT THE FOUNDATION.

ALTERNATIVELY PIPEWORK SHOULD PASS THROUGH A SUITABLY STRENGTHENED OPENING IN THE FOUNDATION, I.E. FOUNDATION SHUTTERED AND A PROVIDED WITH SUITABLE LINTEL OVER THE PIPE ALLOWING FOR SUFFICIENT SPACE FOR MOVEMENT TO ENSURE THAT THE DRAIN IS CAPABLE OF MAINTAINING LINE AND GRADIENT. OPENING SHOULD BE MASKED WITH GRANULAR BACKFILL (PEA SHINGLE) AROUND PIPE. DPC TO BE PROVIDED, AS REQUIRED BY BUILDING CONTROL.

ADVICE FROM STRUCTURAL ENGINEER TO BE SOUGHT ON SUITABILITY OF PIPE RUNNING THROUGH FOUNDATION BEFORE CONSTRUCTION.

PIPES PASSING THROUGH WALLS:

WALLS ABOVE PIPES PASSING THROUGH SUBSTRUCTURE WALLS TO BE SUPPORTED ON SUITABLE LINTEL ON SEMI-ENGINEERING BRICKS. PIPE TO BE PROVIDED WITH A 50MM CLEARANCE ALL ROUND. OPENING TO BE MASKED WITH GRANULAR BACKFILL (PEA SHINGLE) AROUND PIPE. DPC TO BE PROVIDED, AS REQUIRED BY BUILDING CONTROL.

ALTERNATIVELY WHERE NEW PIPEWORK PASSES THROUGH EXTERNAL WALLS THE PIPE WORK IS TO BE PROVIDED WITH 'ROCKER PIPES' AT A DISTANCE OF 150MM EITHER SIDE OF THE WALL FACE. THE 'ROCKER PIPES' MUST HAVE FLEXIBLE JOINTS AND BE A MAXIMUM LENGTH OF 600MM.

THIS DOCUMENT DOES NOT CONSTITUTE A WORKING DRAWING AND HAS BEEN PREPARED FOR PRICING & BUILDING REGULATIONS APPROVAL ONLY. NO LIABILITY IS ACCEPTED FOR ANY LOSS OF ANY SORT OR ADDITIONAL EXPENSE INCURRED CONSEQUENT ON ANY FAILURE, REAL OR ALLEGED, OF THE DRAWINGS AND SPECIFICATION.

SPECIALIST SUPPLIERS/SUBCONTRACTORS TO SUBMIT DRAWINGS AND DETAILS TO FREDRICK ADAM ARCHITECTS FOR APPROVAL PRIOR TO MANUFACTURE/CONSTRUCTION.

DO NOT SCALE FROM DRAWINGS. WORK TO REQUIRED DIMENSIONS. ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO FABRICATION OF COMPONENTS / SETTING OUT. REPORT ANY DISCREPANCIES TO FREDRICK ADAM IMMEDIATELY.

LAND TO THE REAR OF DEERHURST

Mr and Mrs P Wheeler
The Shrave
Four Marks,
Hampshire, GU34 5BH

REVISION	DATE	DESCRIPTION

PROJECT NO: FA-R-20-17
MODEL FILE:
DRAWN BY: HBR
CHKD BY: TAD

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SHEET TITLE

B000
Proposed Substructure

FA-R-20-17
Scale: 1: 50 @ A1

SUBSTRUCTURE LEGEND:

- RWP RAINWATER DOWNPIPE
- SVP SOIL VENT PIPE
- AAV AUTOMATIC AIR VALVE
- DC DIRECTION CONNECTION
- MOVEMENT JOINT
- INDICATES PERIMETER INSULATION
- INDICATES STUD WALL OVER
- INDICATES INDICATIVE FOUNDATION LINES. REFER TO SE DRAWINGS
- DENOTES PROPOSED DRAINAGE RUNS
- DENOTES ASSUMED EXISTING DRAINAGE RUNS

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DRAFT - SUBJECT TO REVIEW BY BUILDING CONTROL & STRUCTURAL ENGINEER. TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DOCUMENTATION